BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

BYATARAYANAPURA SUB DIVISOIN

Name of the Work : **Improvements to Roads and Drains and Construction of Culverts at Saraipalya Colony and Others Area in ward No. 06, Byatarayanapura Sub Division**

EMB

Job Code : 006-20-000163

BRUHATH BANGALORE MAHANAGARAPALIKE
YELAHANKA ZONE
1ST AND FINAL BILL

Name of work: Improvements to Roads and Drains and Construction of Culverts at Saraipalya Colony and Others Area in ward No. 06, Byatarayanapura Sub Division

Work Order No: BBMP/EE/BTP/WO/191/2019-20 dt: 16.01.2020
JOB NUMBER: 006-20-000163
Estimate Cost: 100.00 lakhs.
As No: AS/EE(BTP)/91/2019-20 Dt: 29.11.2019
Ts No :TS/ SE(YNK)/20/2019-20 dt : 07.01.2020
Name of Contractor : M/s Executive Engineer, KRIDL

Sl. No.	Description of work	Unit	Measurements No	L	B	D	Qty	Rate	Amount
1	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 **P.No. 140/ Item No. 18.47 / PWD SR 2018-19**								
		cum							
	Qty Recorded as per Premeasurement Page No. is 1 and 4 (1)						**304.90**	952.94	290551.00
2	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ It No								
		cum							
	Qty Recorded as per Premeasurement Page No. is 3 & (2)						**1148.51**	137.90	158380.00
3	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 20kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. MORTH Specification No. 2100 **Page No. 222 / It No. 27.18/ PWD SR 2018-19**								
		cum							
	Qty Recorded as per Premeasurement Page No. is 5 & 3						**307.21**	5421.90	1665662.00
4	KSRB 5.3-3 **Providing and constructing granite / trap / basalt size stone** masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 25/ It No. 5.9/ PWD SR 2018-19**								
	For Culverts	Cum	2	3.60	0.60	0.90	3.89		
			2	4.20	0.60	0.90	4.54		
			2	3.70	0.60	0.90	4.00		
			2	5.00	0.60	0.90	5.40		
			2	5.60	0.60	0.90	6.05		
			2	5.80	0.60	0.90	6.26		
			2	4.40	0.60	0.90	4.75		
			2	9.80	0.60	0.70	8.23		
			2	2.00	0.60	0.70	1.68		
							44.80	5811.98	260353.00

Assistant Engineer
Ward No. 06
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Assistant Executive Engineer
Byatarayanapura Sub Division
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5 KSRRB M 1200-15.2: Plain / Reinforced cement concrete M20 with OPC Cement @ 320kgs, with 20mm and down size graded granite metal coars aggreagates @0.69 cum and fine aggreagates @ 0.46 cum, with superplastiser@ 3lts confirming to IS9103 -1999 Reaffirmed - 2008, in open foundation complete as per drawing and technical specifications case-II, with batching plant transist mixer and concrete MORTH specification No. 1500, 1700 & 2100,/P No. 222/ Item No. 27.27/ PWD SR 2018-19

		cum			
Qty Recorded as per Premeasurement Page No. is 5 ಪುಟ ಸಂ-5			**25.56**		
	up to 125% Qty		24.30	5148.42	125107.00
	Above 125% Qty		1.26	5148.42	6487.00

6 KSRB 15.1.3: **Providing FLush pointing** to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 115/ Item No. 15.1/ PWD SR 2018-19

For Culverts Pointing	Sqm	2	3.60	0.80	5.76
		2	4.20	0.80	6.72
		2	3.70	0.80	5.92
		2	5.00	0.80	8.00
		2	5.60	0.80	8.96
		2	5.80	0.80	9.28
		2	4.40	0.80	7.04
		2	9.80	0.60	11.76
		2	2.00	0.60	2.40
					65.84
			Limited to		**54.00** 149.46 8071.00

06/10/2022
Assistant Engineer
Ward No. 06

6/10/2022
Assistant Executive Engineer
Byatarayanapura Sub Division

7 **Providing and laying plain/reinforced cement concrete for side drains** using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200.including cost of materials, labour, HOM complete as per specifications.-do- Wall & bottom thickness 15cm. **PWD SR 2018-19 P. No 271 It No 37.59.2**

a **For Drain Bed**

		cum			
Drain L/s Road ID W1825 colony main road		1	30.00	0.90	0.15 4.05
		1	30.00	0.90	0.15 4.05
		1	30.00	0.90	0.15 4.05
		1	30.00	0.90	0.15 4.05
		1	11.00	0.90	0.15 1.49
		1	30.00	0.90	0.15 4.05
		1	12.00	0.90	0.15 1.62
					23.36

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	1	30.00	0.90	0.15	4.05
	1	3.00	0.90	0.15	0.41
Drain R/s Road ID W1825 colony main road	1	30.00	1.05	0.15	4.73
	1	30.00	1.05	0.15	4.73
	1	30.00	1.05	0.15	4.73
	1	30.00	1.05	0.15	4.73
	1	7.00	1.05	0.15	1.10
	1	30.00	1.05	0.15	4.73
	1	5.00	1.05	0.15	0.79
	1	16.00	1.05	0.15	2.52
	1	24.70	1.05	0.15	3.89
	1	16.50	1.05	0.15	2.60
	1	27.80	1.05	0.15	4.38
	1	30.00	1.05	0.15	4.73
	1	30.00	1.05	0.15	4.73
	1	30.00	1.05	0.15	4.73
	1	18.00	1.05	0.15	2.84
for drain to Road ID W1821 L/s	1	30.00	1.05	0.15	4.73
	10.00	1.05	0.15	1.58	
for drain to Road ID W1821 R/s	1	30.00	1.05	0.15	4.73
	1	10.00	1.05	0.15	1.58
B For Drain Side Wall					
Drain L/s Road ID W1825 colony main road	2	30.00	0.15	0.60	5.40
	2	30.00	0.15	0.60	5.40
	2	30.00	0.15	0.60	5.40
	2	30.00	0.15	0.60	5.40
	2	11.00	0.15	0.60	1.98
	2	30.00	0.15	0.60	5.40
	2	12.00	0.15	0.60	2.16
	2	30.00	0.15	0.60	5.40
	2	3.00	0.15	0.60	0.54
Drain R/s Road ID W1825 colony main road	2	30.00	0.15	0.70	6.30
	2	30.00	0.15	0.70	6.30
	2	30.00	0.15	0.70	6.30

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15-10-2020

15/10/2020

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	2	30.00	0.15	0.70	6.30
	2	7.00	0.15	0.70	1.47
	2	30.00	0.15	0.70	6.30
	2	5.00	0.15	0.70	1.05
	2	16.00	0.15	0.70	3.36
	2	24.70	0.15	0.70	5.19
	2	16.50	0.15	0.70	3.47
	2	27.80	0.15	0.70	5.84
	2	30.00	0.15	0.70	6.30
	2	30.00	0.15	0.70	6.30
	2	30.00	0.15	0.70	6.30
	2	18.00	0.15	0.70	3.78
for drain to Road ID W1821 L/s	2	30.00	0.15	0.70	6.30
	2	10.00	0.15	0.70	2.10
for drain to Road ID W1821 R/s	2	30.00	0.15	0.70	6.30
	2	10.00	0.15	0.70	2.10
					224.75
			Limited to		**211.47**
			up to 125% Qty		201.51 7070.20 1424716.00
			Above 25% Qty		9.96 7070.20 70419.00

Assistant Engineer
Ward No. 06

Assistant Executive Engineer
Byatarayanapura Sub Division

8 KSRRB M2200-6. **Providing T.M.T. steel reinforcement for R.C.C. work** including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 - do- TMT Bars Fe 500 **PWD SR 2018-19 P.No 229 It 28.8.2**

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Qty Recorded as per Premeasurement Page No. is 7 & 8				13.49
	up to 125% Qty			13.30 72326.98 961949.00
	Above 25% Qty			0.19 72326.98 13742.00

9 **Providing and fixing RCC precast cover slab of 100mm thick** for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)

Drain L/s Road ID W1825 colony main road	sqm	1	30.00	0.75	22.50
		1	30.00	0.75	22.50

		1	30.00	0.75	22.50
		1	30.00	0.75	22.50
		1	11.00	0.75	8.25
		1	30.00	0.75	22.50
		1	12.00	0.75	9.00
		1	30.00	0.75	22.50
		1	3.00	0.75	2.25
	Drain R/s Road ID W1825 colony main road	1	30.00	0.90	27.00
		1	30.00	0.90	27.00
		1	30.00	0.90	27.00
		1	30.00	0.90	27.00
		1	7.00	0.90	6.30
		1	30.00	0.90	27.00
		1	5.00	0.90	4.50
		1	16.00	0.90	14.40
		1	24.70	0.90	22.23
		1	16.50	0.90	14.85
		1	27.80	0.90	25.02
		1	30.00	0.90	27.00
		1	30.00	0.90	27.00
		1	30.00	0.90	27.00
		1	18.00	0.90	16.20
	for drain to Road ID W1821 L/s	1	30.00	0.75	22.50
		1	10.00	0.75	7.50
	for drain to Road ID W1821 R/s	1	30.00	0.75	22.50
		1	10.00	0.75	7.50
	Covering slabs over Existing drain	1	30.00	1.20	36.00
		1	30.00	1.20	36.00
		1	30.00	1.20	36.00
		1	30.00	1.20	36.00
		1	25.00	1.20	30.00
		1	21.00	0.90	18.90
		1	20.00	0.90	18.00
		1	19.80	0.90	17.82
		1	18.60	0.90	16.74
					779.46
				up to 125% Qty	610.50 2337.00 1426739.00
				Above 25% Qty	168.96 2337.00 394860.00

734.46

Assistant Engineer
Ward No. 06

Assistant Executive Engineer
Byatarayanapura Sub Division

10 Providing and fixing **RCC precast cover slab of 250mm** thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)

Culverts	sqm	1	3.60	1.50	5.40
		1	4.20	1.50	6.30
		1	3.70	1.50	5.55

17.25

		1	5.00	1.50		7.50	
		1	5.60	1.50		8.40	
		1	5.80	1.50		8.70	
		1	4.40	1.50		6.60	
		1	9.80	1.65		16.17	
		1	2.00	1.50		3.00	
					Total Qty	67.62	
					Limited to	67.50	5418.00	365715.00

Assistant Engineer
Ward No. 06

Assistant Executive Engineer
Byatarayanapura Sub Division

11 KSRRB M600-6: cement concrete pavement, construction unreinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with 43 grade cement or any other type as per clause 1051.2.2M20/M30 at 380/450 kg per cum, coarse and fine aggregate conforming to IS: 383, maximum size of coarse aggregate not exceeding 25mm, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including leveling the form work as per drawing.), spreading the concrete with shovels, rackers compacted using needle, scred and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved curing compound, finishing to lines and grade as per drawing complete

For ROAD work - cross road-1	cum	1	30.00	4.40	0.15	19.80	
		1	30.00	4.40	0.15	19.80	
		1	12.00	4.40	0.15	7.92	
Saraipalya colony main road-2		1	30.00	4.45	0.15	20.03	
		1	30.00	4.45	0.15	20.03	
		1	30.00	4.45	0.15	20.03	
		1	12.00	4.45	0.15	8.01	
Cross road-3		1	28.00	4.50	0.15	18.90	
Cross road-4		1	30.00	4.60	0.15	20.70	
		1	4.00	4.60	0.15	2.76	
Cross road-5		1	30.00	4.50	0.15	20.25	
		1	6.00	4.50	0.15	4.05	
						182.27	5210.96	949802.00

Assistant Engineer
Ward No. 06

Assistant Executive Engineer
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12 **Vaccum De- writing with vaccum pump** and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift No. 171/ Item No. 22.7/ PWD SR 2018-19

For ROAD work - cross road-1	**Sqm**	1	30.00	4.40	132.00
		1	30.00	4.40	132.00
		1	12.00	4.40	52.80
Saraipalya colony main road-2		1	30.00	4.45	133.50
		1	30.00	4.45	133.50
		1	30.00	4.45	133.50
		1	12.00	4.45	53.40
Cross road-3		1	28.00	4.50	126.00
Cross road-4		1	30.00	4.60	138.00
		1	4.00	4.60	18.40
Cross road-5		1	30.00	4.50	135.00

	1	6.00	4.50	27.00		
				1215.10	72.08	87584.00

Assistant Engineer
Ward No. 06

Assistant Executive Engineer
Byatarayanapura Sub Division

13 Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (P.NO - 5, I.NO - 2.4, PWD SR-2018-19)

cum				
Qty Recorded as per Premeasurement Page No. ~~is~~ 7 & 13	**234.53**	475.94	111622.00

14 **Providing and installing at site of work 63mm** (0.662) **PVC Pipes** of 6 kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete.

Rmtr				
Qty Recorded as per Premeasurement Page No. ~~is~~ 8 & 14	**435.00**	202.91	88266.00

15 KSRB 2.4 : **Reflling available earth around pipe lines,** cables in layers not layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. (P 7 it 2.11)

Road -1	cum	1	30.00	0.60	0.80	14.40
		1	30.00	0.60	0.90	16.20
		1	30.00	0.65	0.90	17.55
		1	30.00	0.60	0.80	14.40
		1	25.00	0.60	0.85	12.75
Road -2		1	30.00	0.65	0.90	17.55
		1	30.00	0.60	0.85	15.30
		1	30.00	0.60	0.90	16.20
		1	30.00	0.60	0.90	16.20
		1	25.00	0.60	0.85	12.75
Road -3		1	30.00	0.65	0.90	17.55
		1	30.00	0.65	0.90	17.55
		1	30.00	0.60	0.90	16.20
		1	30.00	0.60	0.85	15.30
		1	25.00	0.65	0.90	14.63
	cum	Qty Vide Item No. 13				**234.53** 134.62 31572.00

Assistant Engineer
ಸಹಾಯಕ ಅಭಿಯಂತರರು
Ward No. 06
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

Assistant Executive Engineer
ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರು
Byatarayanapura Sub Division
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

16 KSRRB M100-2. Loading and Unloading of stone boulders by manual means complete as per specification MORTH-100/chapter-1 Page No. 136/ Item No. 17.1/ PWD SR 2018-19

		Cum	Qty Vide Item No. 1+2	1453.41	
				1453.41	73.99	107538.00
					Sub Total	**8549159.00**
17	For 12% Applicable GST					1025899.00
18	For 3% KRIDL Charges					256475.00
19	For 1% Labour Cess					85492.00
					Grand Total	**9917025.00**

9917000

Assistant Engineer
Ward No. 06

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Byatarayanapura Sub Division